

[ABSTRACT]

SCREENING METHOD FOR OVERLAPPING SUB-IMAGES

5 For the reproduction of originals, images are generated on an image carrier, for example by printing. The imaging device that generates the image is usually not capable to cover at once the complete image area on the carrier. If the device is capable to cover the full width of the image area, the image may be generated line by line.

10 Devices not having this capability will generate a first portion of an image line on the carrier. An adjacent second portion of the image line is then generated by another imaging device or after a period of time by the imaging device that generated the first portion. The region where the first and second portion meet on the

15 carrier may cause visual artefacts on the final reproduction due to spatial misregistration of the adjacent line portions. This problem is solved by dividing the image in adjacent sub-images having an overlap zone on the carrier. Within this overlap zone two sub-images will be generated on top of each other for reproducing the original

20 image in that zone, thereby reducing or avoiding the artefacts. According to one method, the resulting optical density of the first and second sub-image is reduced within the overlap zone as the outer edge of the sub-image in the overlap zone is approached. The density reduction may be achieved by reduction of the microscopic density of

25 individual microdots or by reduction of the dot percentage or by a combination of these techniques.

Figs. 3 and 4